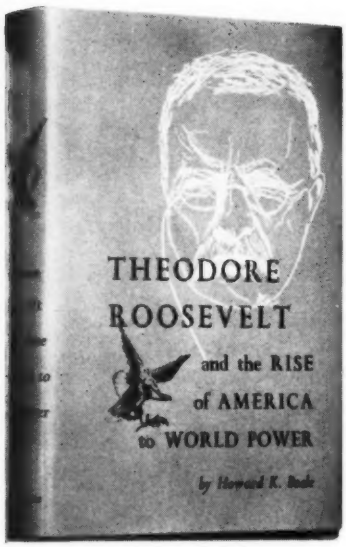
FEBRUARY 1957 · 35c

The Johns Hopkins Magazine

HOW CIVILIZATION CAME TO AMERICA



Theodore Roosevelt

and the Rise of America to World Power

By HOWARD K. BEALE

Professor of History, University of Wisconsin

From a front-page article in the N. Y. Times Book Review:

"Not often has the volatile and exciting nature of Theodore Roosevelt been caught and held in such solid, true proportion. Never, in the field of foreign affairs, have the President's aims and methods been more meticulously examined.... The fullest and fairest statement of Roosevelt's activity in foreign affairs, within the given conditions of his time, as now exists." *Elting E. Morison*

$6
AT YOUR BOOKSTORE

The Johns Hopkins Press
Baltimore 18, Maryland

The Johns Hopkins Magazine

VOLUME VIII February, 1957 NUMBER 5

Editorial Committee

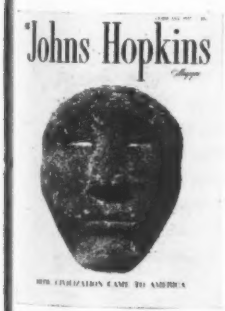
*

P. Stewart Macaulay
Chairman

Don Cameron Allen
Philip Bard
Eli Frank, Jr.
Palmer H. Futcher
Allan L. Grafflin
Russell A. Nelson
Sidney Painter
Robert H. Roy
Thomas B. Turner
Benjamin H. Willier

Corbin Gwaltney
Editor

Richard Lidz
Assistant



The Cover

The face on the cover is a primitive Eskimo mask found on the northwest coast of North America. It is made of whalebone. A shaman, "a spirit-inspired wonder-worker," wore it in ceremonial rites. The mask is now in the collection of primitive art belonging to Alan Wurtzburger and serves to introduce the article on the coming of civilization to America, beginning on page 8.

PHOTOGRAPH BY ALAN BEARDEN

In This Issue

THE SHRIVER MURALS 4

For years, Johns Hopkins has been awaiting the arrival of the paintings commissioned under the unusual will of Alfred Jenkins Shriver. They've come; here are photos.

CIVILIZATION PUZZLE ..... *George F. Carter* 8

How did culture develop in this hemisphere, before the arrival of the Spaniards? Some say it grew by itself; others, including the author, disagree. The battle rages.

ACTOR 14

John Astin got the theater bug young. Like others before him, he found the road from campus to Broadway a hard one, but he traveled it. Here is how he made out.

EDITOR'S NOTES: AN INFORMAL REPORT 2

LETTERS TO THE EDITOR 3

ALUMNI-TRUSTEE NOMINEES 23

EVENTS OF THE MONTH AT JOHNS HOPKINS ... Cover III

Copyright 1957 by the Johns Hopkins University

THE JOHNS HOPKINS MAGAZINE is published monthly from October to June inclusive by the Johns Hopkins University, Baltimore 18, Maryland. Subscription, $2.00 per year; single copies, 35 cents. Entered as second-class matter at the Post Office at Baltimore, Maryland, under the Act of March 3, 1879. EDITORIAL OFFICE: The Johns Hopkins University, Baltimore 18, Maryland. Notice of change of address should reach the magazine at least thirty days before the publication date of the issue with which it is to take effect. When ordering a change of address, please enclose your present address label or an exact copy of it.

MEDICAL-
DENTAL
EXCHANGE

*

Financial Services
Since 1938

*

DELINQUENT
COLLECTIONS
for the
PROFESSION

An Audited and Bonded
Credit Service
for the
Doctor, Hospital
and Patient

*

Medical-
Dental
Collections
INC.

809 CATHEDRAL ST.
BALTIMORE 1, MD.

LEO BADART
PRESIDENT

Audited by
WILLIAM A. GILLESPIE, C.P.A.

EDITOR'S NOTES
AN INFORMAL REPORT

We let last month's issue slip by without recording any New Year's resolutions. This was a grave oversight, perhaps, but we are inclined to think otherwise. We *made* some resolutions, all right, but they're known only to us, a state of affairs likely to prevent our disappointing anybody except ourselves.

The Johns Hopkins University's own new year might be said to begin this month—on the twenty-second, to be exact. Around here, the twenty-second is not only George Washington's birthday; it is the University's birthday, as well. On that date in 1957, Johns Hopkins begins its eighty-second year.

On the same day, Johns Hopkins will inaugurate its eighth president, Milton Stover Eisenhower. Mr. Eisenhower has been on the job since early fall; the ceremonies this month, however, will make it official

Shortly thereafter, Mr. Eisenhower will take to the road to meet Johns Hopkins alumni and to give Johns Hopkins alumni an opportunity to meet him. The tentative schedule—covering, as we go to press, alumni groups in Atlanta, Chicago, Cleveland, New York, Pittsburgh, and Washington—appears in our "Events" department this month, and notices, confirming the dates and locations, will be mailed soon to alumni living in or near these cities.

One of the nice things about editing a magazine like this is the number of subjects which, in the course of our editorial duties, we become acquainted with. In this issue and December's alone, for instance, we dealt with children's literature, public health in Latin America, art appreciation, eye examinations, the rocky road to a theatrical career, and the development of civilization in America. We find this constant exposure to new ideas and unfamiliar fields enormously stimulating, and we hope our readers do, too.

To anyone who is currently looking around for a subject in which to interest himself, may we recommend a reading of the article beginning on page 8. It is the story, written by a professor who is always getting into controversies about it, of the jigsaw puzzle of American civilization: of how, long before Columbus turned up on these shores, Indians in this New World were busy building a civilization with uncanny parallels to some in the Old World. Trying to explain this, investigators have found themselves in pitched battles with one another—only verbal battles, happily—and after you read the article, you will understand why.

You may, in fact, be ready to join battle yourself, by the time you've got through. Whether or not you side with our author matters neither to us nor to him. What *does* concern us, however, is that you give yourself the opportunity to share in the fascinations of the argument.

That is why, in fact—with our stories about the wide range of subjects that interest men in universities—we hopefully keep doing business every month at this same old stand.

A couple of months ago, as part of our continuing series on diagnostic techniques in medicine, we published an article about eye examinations. In the pictures accompanying the article, the subject of the eye tests was a colleague on the staff of this magazine; and a noble performance it was, on his part. The man is sensitive about his eyes, shuddering pitifully when anyone so much as points a pencil in his direction. But, for the good of the editorial cause, he submitted to several hours of poking, probing, and testing his eyes while the photographer, Werner Wolff, fired away.

The reaction to the pictures was immediate and startling. Our model heard from people with whom he had been out of contact for years, most of whom went out of their way to comment on his ocular equipment in joshing terms. One letter was particularly intriguing. It purported to come from a clothing firm,

and asked us to tell them how to get in touch with the subject of our pictures.

"Recently we have been dissatisfied with the models on which we have been displaying our suits," the letter said. "You, however, have hit upon a perfect solution to our problem. . . . That is the best-looking dummy we have seen in years."

LETTERS

CHILDREN'S BOOKS

May I be permitted to reinforce *all* of J. Hillis Miller's remarks [December issue] concerning children, books, and the enjoyment of reading? He has done a completely expert job, in the opinion of this professional. Hopefully, many parents and teachers will read it.

I particularly want to reinforce Dr. Miller's remarks dealing with the children's classics. By all means let a child read the unexpurgated versions—except, as the author points out, "where the psychologist rules otherwise." (But I, as one psychiatrist, would want this done rarely, if ever.)

As adults we simply must not overprotect our children emotionally any more than physically. Normal emotional growth requires experiencing small doses of a wide variety of things, including fright and violence, so that youngsters can experiment with ways of handling them while young.

Stories permit these emotions to be felt in a safe context. It is a sad state of affairs when *Mother Goose* appears also as *Happy Goose*. Every verse in this new edition is slightly altered and extends to "This little piggy had *some*" instead of the usual "none." Who is fooling whom? Why not help face reality? Children need to know there *is* the possibility of having "none" of something in this world.

Woe to our insecure times in which the children's classics are watered down in response primarily to the anxieties of the parents, not the child.

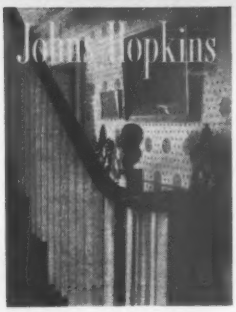
CHRISTINE WAPLES KEHNE, M.D.
Washington, D. C.

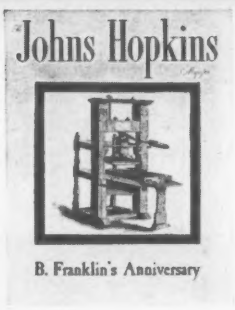
JUST ANOTHER "LIFE"

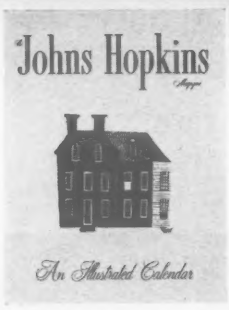
Please discontinue my subscription. In my opinion *The Johns Hopkins Magazine* was very fine at first, with articles well worth reading. Now the reading matter seems to be kept to a minimum, and the magazine is just another *Life*—though, of course, on a much higher plane. Pictures do not take the place of thoughtful, original, well-written articles.

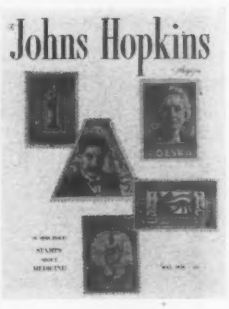
Newcastle, Maine H. K. B.

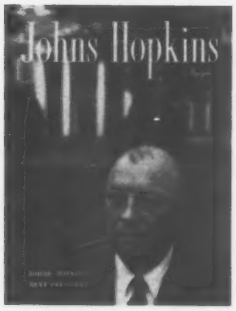
We'd welcome other readers' comments on our text-and-picture balance. —THE EDITORS.

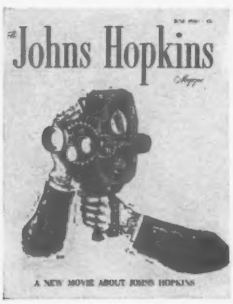


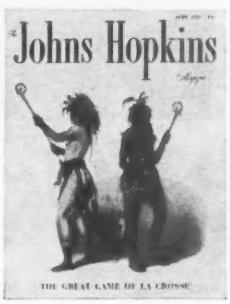


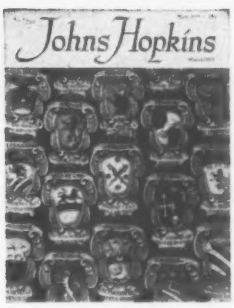


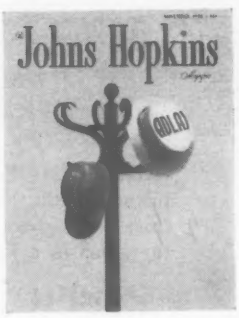












THE NEXT NINE ISSUES TWO DOLLARS

The Johns Hopkins Magazine
Baltimore 18, Maryland

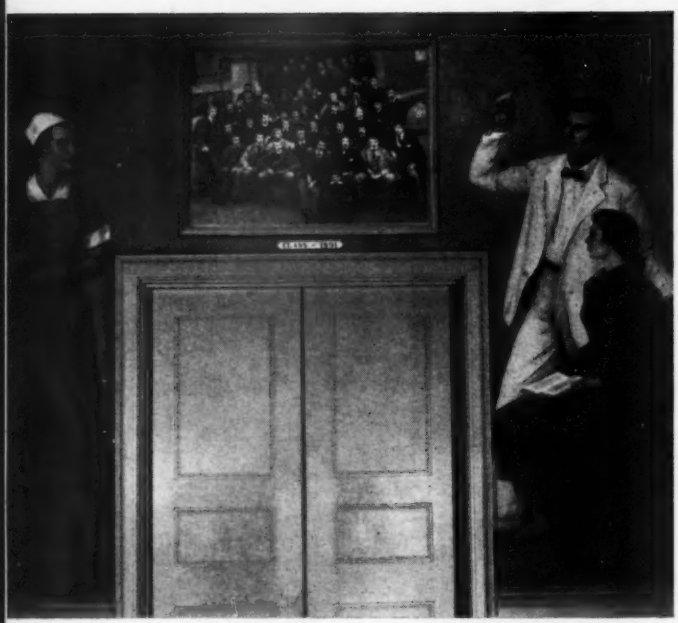
☐ Payment is enclosed
☐ Bill me later

Please enter the following subscriptions to The Johns Hopkins Magazine for ☐ one year, $2; ☐ two years, $4

Name .....

Address .....

City ..... *Zone* .... *State* .....



Alfred Jenkins Shriver appears at the left in the picture of the class of 1891 (above). Working from a yearbook picture, Artist Kroll painted the group as a framed photograph.

THE SHRIVER MURALS

A SIX-PANEL mural which took seventy-one-year-old artist Leon Kroll more than seven thousand hours of painting to complete now adorns the main lobby of Shriver Hall at Johns Hopkins. Mr. Kroll's mural is the major work of art for which the late Alfred Jenkins Shriver, B.A. '91, provided when he bequeathed money to the University to build an auditorium bearing his name. Mr. Shriver's will, called by fellow-lawyers "one of the most remarkable documents of our time," also stipulated that sculptures of Daniel Coit Gilman, William Henry Welch, and Isaiah Bowman, and murals of the original University and Hospital trustees and of Baltimore clipper ships, be placed in the building.

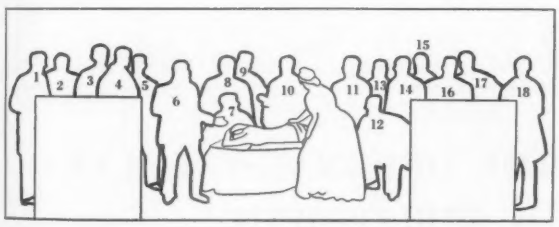
Otherwise, the gift would be forfeited.

The technical process of creating the paintings was elaborate. Likenesses of sixty-three life-size figures had to be obtained, studied, and sketched. An over-all design, including all the subject-matter designated in the will and esthetically pleasing to boot, had to be conceived and scaled.

"The challenge intrigued me," says Mr. Kroll. "I realized that artists of the past painted murals under certain limitations imposed by the authorities of their time and still created works of art loved and admired to this day. At Johns Hopkins the subject-matter had to be restricted in keeping with the character and function of the building the paintings embellish.

"The artist who accepts a commission to paint monumental works for a public building assumes a responsibility not only as a creative artist but as an interpretive artist, for it is his job to communicate to the best of his ability what the building stands for."

Here, with identifications of the subjects in each painting, is how the artist finally carried out the job.



THE ORIGINAL FACULTY OF MEDICINE

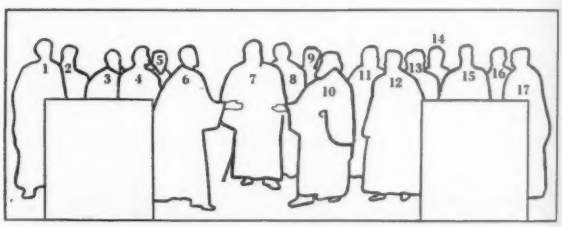
1. John S. Billings
2. Samuel Theobald
3. Henry M. Hurd
4. J. Whitridge Williams
5. Franklin P. Mall
6. William H. Welch
7. Henry M. Thomas
8. Howard A. Kelly
9. Lewellys F. Barker
10. William Osler
11. William S. Halsted
12. Simon Flexner
13. John M. T. Finney
14. John J. Abel
15. John N. Mackenzie
16. William H. Howell
17. William Sydney Thayer
18. William David Booker

THE PHILANTHROPISTS OF BALTIMORE

1. Moses Sheppard
2. George Peabody
3. Enoch Pratt
4. James, Cardinal Gibbons
5. Arthur B. Kinsolving
6. John D. Rockefeller, Jr.
7. Robert H. Jenkins
8. William H. Welch
9. Johns Hopkins
10. Theodore Marburg

FAMOUS BEAUTIES OF BALTIMORE

1. Ida Lee Wade (Mrs. James Teackle) Dennis
2. Lota Robinson
3. May Handy (Mrs. James Brown) Potter
4. Edith Johns (Mrs. Bruce) Cotten
5. Harriet Wade (Mrs. Charles Morris) Howard
6. Marie Stirling (Mrs. J. Lee) Tailer
7. Fannie Lurman (Mrs. Dorsey) Williams
8. Anne Foster (Mrs. N. Winslow) Williams
9. Louise Morris (Mrs. Henry) Clews
10. Mary W. Keyser (Mrs. De Courcy Wright) Thom

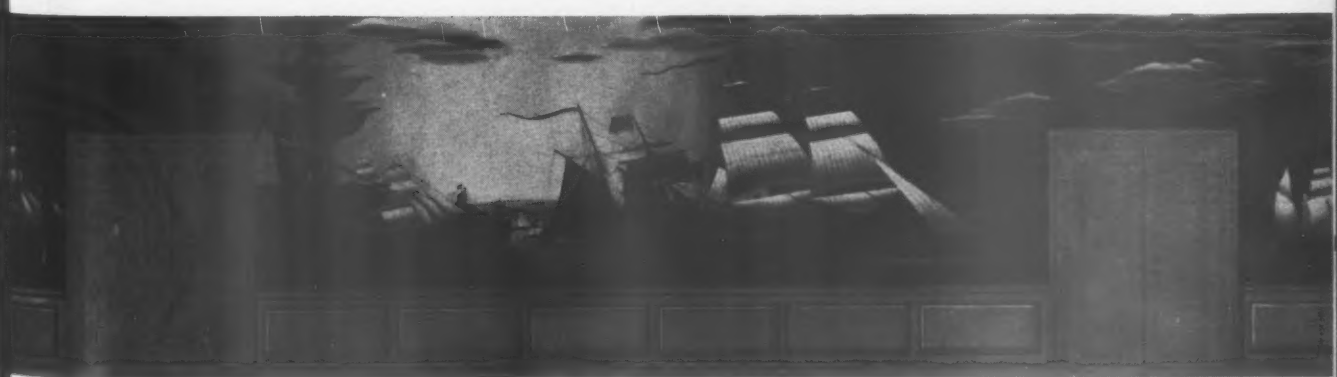


THE ORIGINAL FACULTY OF PHILOSOPHY

1. A. Marshall Elliott
2. Charles S. Peirce
3. William Hand Browne
4. George S. Morris
5. Henry Wood
6. Henry A. Rowland
7. Basil L. Gildersleeve
8. Ira Remsen
9. J. J. Sylvester
10. H. Newell Martin
11. C. D. Morris
12. William K. Brooks
13. Simon Newcomb
14. Herbert Baxter Adams
15. G. Stanley Hall
16. George Huntington Williams
17. Paul Haupt

THE BALTIMORE CLIPPERS

A MURAL depicting the clipper ships of Baltimore (*below*) was painted by James Owen Mahoney, professor of fine arts at Cornell University. Executed on a single piece of Utrecht linen forty-three feet long by eight feet high, the mural represents a Baltimore harbor scene in the early nineteenth century. In the central foreground is the *Chasseur*, a privateer which was also known as the *Pride of Baltimore*. Just behind and to her left is the schooner *St. Lawrence;* farther to the left and behind is the slave brig *Diligente*. In the panel on the extreme left is the well-known *Ann McKim*, launched in Baltimore in 1833; she was the last attempt by Baltimore shipbuilders to convert the speedy, battle-worthy clippers into cargo carriers. On far right is the privateer *Herald*. Commercial shipping brought Baltimore early wealth.



THE AMERICAN CIVILIZATION PUZZLE

Did civilization in this hemisphere develop spontaneously? Or were there outside influences? A fascinating argument rages on

By GEORGE F. CARTER

WHY, people ask, do professors like me study the things we do? Of course, they tell me, Indians are interesting—but are they important? Even if we do manage to find out when and how they developed their civilizations, is the knowledge really worth our working so hard to acquire it?

To such questions I give an emphatic Yes.

We need to know a good deal about the origin of civilization in general. We must know *how* civilization arose. And to answer the "how" we must know when and where. Did civilization arise just once, or several times? What part, if any, did climate and soil and landform and race play in its growth or growths? To give it a modern application: if we get careless with our super-bombs and wipe out civilization, what is the likelihood of a new civilization springing up? How soon? What kind? And where?

Behind these questions lies a further set of questions. Is man largely controlled or directed or influenced by his physical environment, or is he relatively independent of it? And another: Is man predominantly inventive or retentive? There have been whole schools of thought, and still are, that take one side or another on these questions. And we still know little, with any certainty, about how civilization arose, spread, and grows.

The growth of the American Indian civilizations has come to be of crucial importance to the whole problem. For some, it is an example of the inventiveness of man. For others it is an example of the overwhelming force of the physical environment in the molding of man. For still others, it is an example of how uninventive man really is, of how extremely retentive he is, and of the complete dominance of the *spread* of ideas—or "diffusion"—over the *invention* of ideas.

Great battles—really fierce battles—have raged over such things. The current battleground, the current testing-ground, is America.

And, in these battles, I find myself in the thick of things.

IN the area from southern Mexico to northern Chile, civilization apparently began rather suddenly, possibly about 1000 B.C. and probably not earlier than 2000 or 3000 B.C.

The peopleing of America had been accomplished very much earlier, most probably by small bands of rather primitive people who wandered across from northeastern Asia into Alaska and then wandered slowly southward into the open, unpopulated continents that spread before them. They did not "discover" America. They simply drifted in. They did not "migrate" through the Americas. They simply multiplied and each generation moved a few miles. In such a manner it would take only a few thousand years for such people to reach all parts of North and South America. We know they had plenty of time: by the most advanced methods of measuring past time, we now know

The author, shown at left viewing pre-Columbian objects found in Middle America, is professor of geography at Johns Hopkins. Art objects courtesy of Alan Wurtzburger.

PHOTOGRAPHS BY ALAN J. BEARDEN

CIVILIZATION PUZZLE

Continued

that man was here more than thirty-eight thousand years ago. If my current research is right, he was here far earlier than that.

Our present problem, however, is not with this original peopleing, but with what happened once these people had settled down. They entered with simple cultures, lacking domestic animals except the dog, lacking the bow and arrow, lacking any knowledge of pottery-making. When we Europeans discovered them many thousands of years later, the Indian peoples in Middle America were practicing agriculture, making potttery, raising some domesticated animals, practicing metallurgy, using practically all the known techniques of weaving, living in organized city states and even empires, and having great capitals that would rival Rome or Athens or Thebes or Babylon.

Just how did all of this come about? Did they do all of it by themselves, with no help? Or did ideas dribble across the great watery moats of the seas? Or, perhaps, did whole floods of ideas reach them from overseas?

On the answers, scholars violently disagree. This is the Diffusion controversy, and for more than one hundred years it has rustled the ivy on academic halls. Some professors, "Diffusionists," think the evidence indicates that man crossed the oceans carrying ideas with him. Others, "Independent Inventionists," fiercely defend the doctrine that nothing of the sort ever happened. They believe that, lacking strong evidence that such transmission of knowledge took place, it is more likely that groups of men all over the world, faced with similar problems, reached similar solutions—even though these groups never had contact with one another.

Gradually, the Independent Inventionists have had to retreat. Gradually, diffusion has been demonstrated over wider and wider areas, through greater and greater time depths, and for more and more things. In the Old World, agriculture, metallurgy, architecture, and the alphabets tended to arise in one center or another and spread to the others. Each area took the basic ideas and wove them into its own particular way of life, giving them a special local flavor. But fundamentally, most of the basic ideas used in this great area of civilization's early growth had their origins in one center or the other. It has been clear for some time now that the growth of civilization in the Old World was a closely interrelated phenomenon.

The New World was the Independent Inventionist's last great stronghold. Here, he could point out, the American Indians developed *in isolation* from the culture growths of the Old World. And in this isolation they had developed nearly everything that the Old World had. They had invented agriculture, but none of the plants were like the domestic plants of the Old World. They had domesticated a few animals: ducks, turkeys, camels (llamas), guinea pigs. And while these might seem uncomfortably close to ducks, chickens, camels, and rabbits of the Old World, the Indians never domesticated any cow-like animal such as the buffalo. They never used any animal for draft purposes, never milked an animal, never made animal domestication an important part of their lives. So, said the Independent Inventionist (with obvious relief), the seeming similarities are not really significant, after all.

The Old World-New World similarities kept piling up, however. In Middle America (a convenient term to designate the area from southern Mexico to northern Chile) the Indian people built pyramids somewhat as some of the people in the Old World did. But the pyramids were built primarily as commanding locations for temples, rather than for the burial of kings as in Egypt. The Independent Inventionists tended to overlook the presence of just such pyramids in Southeast Asia, with temples on *their* truncated tops. Some of the Diffusionists were equally guilty, and played right into the Independent Inventionists' hands, by insisting that nearly all ideas came from Egypt, where of course the pyramids were royal tombs.

The list of men who have entered the debate over the separateness of the Americas from Asia and Eurafrica, and the mountains of evidence and nonsense that have been presented, could be fitted into a doctoral dissertation only with difficulty. Almost from the beginning there were rumblings of Asiatic contacts with America. The Spaniards learned from the Incas of Peru that they had legends of people coming from across the Pacific to trade. And the Incas insisted that they had sent out a great fleet of balsa-log rafts that were gone for two years and finally returned with stories of lands across the sea. This strange tale was believed by the Spaniards, and there followed a series of intrigues over who should head the expedition that would discover another source of wealth like Mexico or Peru. In the political maneuvering, the wrong man ended up in the job. He followed the wrong directions, and the Spaniards found themselves in the impoverished, Negro-populated islands of the southwest Pacific. The Incas' tale was discredited. .

The sequel has been written in this decade of the twentieth century. The intrepid Thor Heyerdahl has demonstrated that the Incas could have done just what they said they did; that balsa rafts *can* be sailed across the Pacific. And Heyerdahl has since learned enough

GUESSING GAME

Judging from the facial characteristics, hair-do's, and other physical features of these objects, what do you gather were the racial and cultural influences felt by the primitive American artists who fashioned them? A variety of influences seems to have been at work. Such guessing games, however, can be inconclusive, even dangerously misleading, unless their results can be coupled with other data. Experts have done so, and the resemblances between primitive American cultures and overseas cultures appear too close to be coincidental. Inferences from such resemblances—and denials of inferences—have resulted in scholarly controversies that have long rustled the ivy on academic halls.

about such rafts that, should he wish to, he could now sail one to Asia and then turn around and sail back. By studies in the Galapagos Islands he has shown that the Incas used these islands, six hundred miles offshore, as a base for their fishing fleet—no mean bit of navigation for people using rafts. But it was long denied that the Indians possessed such ability.

THE evidence was difficult to throttle. It was pointed out that the game of parchesi, which we got from India, was practically the national pastime in Mexico when the Spanish reached there. There was no mistaking the game. All the rules, and the shape of the board on which it was played, were as we know the game today. In addition, it had special meanings that were duplicated in India.

In America, the Indians blew on pipes of Pan. The pipes blew the identical notes, in the same scale, on both sides of the Pacific. As if this were not enough, in

Text continued on page 21
Next page: Map, Pacific cultures

ORIENTAL CRAFT, LIKE INCAS',
EMPLOYED CENTERBOARD
AND TRAVELED FAR

Micronesia

Melanesia

COINCIDENCE? COMPARE
THE DETAILS OF THIS
FIGURE FROM BALI
WITH THOSE ON FIGURE
FOUND IN MEXICO

CG

culture trails in the Pacific

MAP NOT TO SCALE

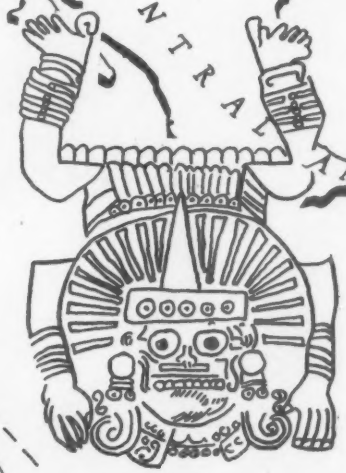
NORTH AMERICA

CENTRAL AMERICA

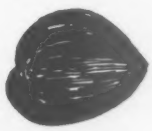
SOUTH AMERICA

(POLYNESIAN) DOUBLE CANOE WITH OUTRIGGER

IN BALSA-LOG RAFTS, EQUIPPED WITH CENTERBOARDS, INCAS COULD CROSS *and* RECROSS THE PACIFIC, EVEN AGAINST WIND



FROM VERA CRUZ, A BALI-TYPE FIGURE, ONE OF MANY CLUES TO CULTURAL DIFFUSION



DID COCONUTS FIRST COME TO AMERICA BY FLOATING ACROSS THE PACIFIC? OR IS IT MORE LIKELY THAT SOMEONE BROUGHT THEM

?

Polynesia

Big break: a part in the off-Broadway hit, *The Threepenny Opera.*

ACTOR

A YOUNG MAN DEVOTED TO THE THEATER WORKS HIS WAY TO A PART ON BROADWAY

"I guess," says John Astin, "I have always liked to make believe." In the fifth grade his big interest was demonstrating a marionette theater his parents had given him. In freshman year at college he was stealing the show in a reading of *The Circle*, by Somerset Maugham. As a sophomore he was playing in Noel Coward's *Ways and Means*. As a junior he was switching from a math to a drama major and working in every dramatic activity he could get a part in. "Everything had been in a turmoil, but then things seemed to settle down for me." He has had periods of doubt about the theater since then. But now, at 26, he is still in it and is going strong.

In *Threepenny Opera*, John Astin got his New York start. For a view of how this scene looked when the play opened at the Theatre de Lys, turn to the next page.

ACTOR

Continued

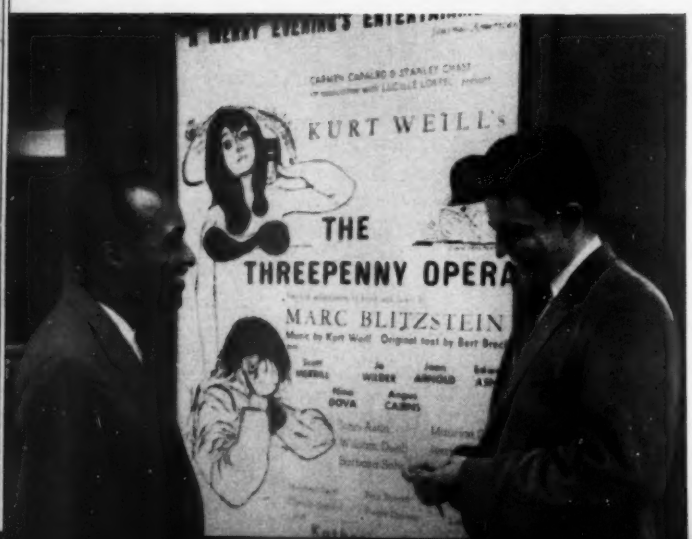
ASTIN MAKES THE TRANSITION

The road from campus theater to New York theater is not an easy one. John Astin was more fortunate than most: he did traverse it. Most who try it never do.

Between his junior and senior years at Johns Hopkins, Astin did summer stock in Maine. Back in school he dived into studies of literature and tried his hand at writing, much of it on his own. The summer after he graduated he went to the University of Minnesota and was hired to play two parts in a road tour through the upper Midwest. He took a theater course by corre-

Rehearsals (left) continue even after a play is open. Before it opens, rehearsal pay is five dollars a week.

Studying a script (above), Astin contorts himself on sofa. At left, he stands by a poster with his name in small print.



The play turned out to be a big hit. At right is the scene being rehearsed in the picture on preceding page.

THAT FEW SUCCEED IN: CAMPUS DRAMATICS TO NEW YORK THEATER

spondence while touring and went back to the University to enroll in the English department. He was busy in theater work, in and around Minneapolis, also.

He was ready, at times, to abandon all thoughts of the theater as a profession and devote himself to academic work and writing. But his understanding of the theater as an art form grew and grew. This drew him back; he left Minnesota, went to New York, wrote for a few months, and began looking for theater work.

One day he answered an "open call" for singers in the projected production of *Threepenny Opera*. He was not a singer, he admitted when questioned, but allowed as how he could carry a tune. He made his way through "Old Mill Stream" and was invited back for an audition the next day. He went, waited for three hours, never got a singing audition, but was hired. When *Threepenny* closed for want of a theater to house it, he survived by modeling, doing bit parts in TV and summer stock, and drawing unemployment pay, which soon ran out. A year later, *Threepenny* reopened and was a hit.

Hired for a part in *Major Barbara*, Astin understudied others, finally got chance to play them. Below, he meets his wife before show.

ACTOR

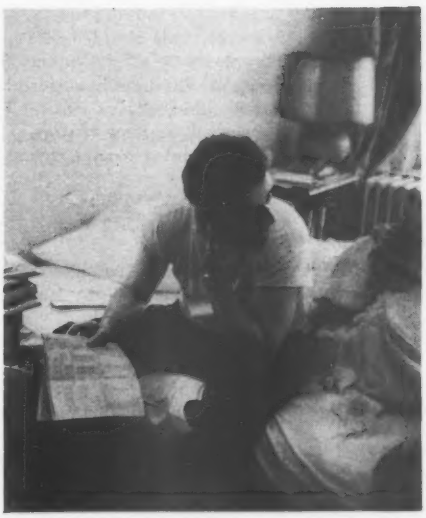
Continued

THE BIG BREAK ON BROADWAY: A PART IN "MAJOR BARBARA"

Even though it was in New York, *Threepenny Opera* was "off-Broadway," and the step from off-Broadway to Broadway itself is often as tough as entering New York in the first place. John Astin kept studying. He was admitted to a course under Harold Clurman, the director, who did more to crystallize his thinking, Astin says, than anyone. When Clurman was casting *Tiger at the Gates*, he called in Astin to read. Astin missed getting the part but impressed the producer, Robert L. Joseph. When Joseph produced *Major Barbara*, he hired Astin to play one small role and to understudy three others. This was his Broadway break.

From here, the future stretches unpredictably. His next steps, Astin says, are to keep learning (watching and working with Charles Laughton in *Major Barbara* can be tremendously instructive), and to become well-known. Astin is serious about the work. He has a strong desire: "to create something of value on the stage."

When he gets bigger role, Astin calls every actor's agent he can reach, urges him to come watch.



By *Major Barbara* marquee, Astin meets his old producer from *Threepenny*.

Photographs by Robert M. Mottar

THIS IS THE FOURTH IN A NEW SERIES OF ARTICLES ABOUT HOPKINS ALUMNI

Civilization Puzzle

Continued from page 11

Peru they were played in pairs. Two people stood facing each other, connected by a string that led from one set of pipes to the other. One set of pipes was called Mama and the other Father. The same thing was done in southeast Asia.

Surely this is stretching coincidence extremely far. Is it really reasonable that the same scale, the same notes, and the identical customs would all be reinvented? There is nothing in the climate or in the soil or in man himself that compels such detailed parallels.

MATHEMATICAL and recording systems showed similar strange parallels. In Peru, records of taxes, populations, and histories were kept by tying knots in strings. The system for numbers was a decimal one. A knot tied in one string stood for one, in the next string for ten, in the next for one hundred, and so on.

This is a remarkable invention. It involves the idea that the value of a number is established by its position, and this includes the idea of a decimal place and a zero. It leads directly into negative numbers. All of these concepts we of the Western World received from India.

But when one begins tracing the distribution of such systems as the Peruvian knots in strings, one finds them in the islands of the Pacific and, anciently, in China, Tibet, and India. The Chinese say that they recorded their history by tying knots in strings, before writing was invented.

Thus we have one of the most difficult of mathematical ideas, associated with a particular way of recording it, with a continuous distribution from the probable source, India, to the exact part of America that has a whole host of other parallels to the southeast Asian center.

The material is formidable in extent. A partial list of further parallels appears in the box on this page.

ONE would think from all this that it would quickly be agreed that ideas were indeed carried in some quantity directly from Asia to America. But such has not been the case. Instead, it has been claimed that such transoceanic voyages were impossible, especially for such landlubbers as Chinese or Hindus. The Polynesians were discounted as people with only wooden dugouts totally incapable of such voyages. The Incas were pictured as comical fellows possessed of the world's clumsiest shipping—rafts that could not stay afloat more than a week or so before they had to be pulled out and dried in order to maintain their buoyancy.

The Inca raft, built of great logs of balsa, is now revealed as an excellent ocean-going vessel, capable of voyaging across the Pacific and back, of sailing before the wind or, by ingenious use of centerboards, of sailing into the wind, and of tacking and performing all the

COINCIDENCE?

Here is a sampling of ideas, inventions, and legends suggesting varied contacts between America and the Old World:

MATHEMATICAL

The zero: Used in India, Peru, and Mexico.

Place numeral systems: India to China; Peru and Mexico.

Knot-in-string records: Peru, Polynesia, China (before script).

The zodiac: Asia and Mexico.

TECHNOLOGICAL

The loom: In Peru, with all its Old-World parts.

Cloth: In Peru, all known Old-World weaves.

The wheel: On toys, only, in America.

Alcoholic beverages: Close parallels in Polynesia and Peru.

Metals: Elaborate smelting, casting, and alloying techniques duplicated in Old World and Middle America.

Seamanship: Centerboards used for sailing in Peru and China.

Obsidian mirrors: Polynesia and Peru.

RACIAL

Vivid portraits in stone, clay, and paint, showing Indian, Mongolian, and bearded European types.

Legends giving emphatic, clear-cut descriptions of blond, bearded, learned visitors.

Chinese palm-prints among the Maya.

ARTISTIC

Jade emphasized in Mexico, Peru, and China.

Trefoil arch: Maya and India.

Sacred tree design: Maya and India.

Tiger thrones: Maya and Southeast Asia.

Lotus staff, lotus stone, lotus panels: detailed similarities between Maya and India.

Serpent columns, balustrades: Mexico and southeast Asia.

The diving god: Mexico and Bali.

Copper bells: Made by same technique and with same designs in Mexico and Indochina.

Featherwork cloaks: Peru and Polynesia.

LEGENDARY

Peruvian tales of an expedition across the Pacific.

Chinese document, possibly describing a Buddhist missionary effort in America about 500 A.D.

Polynesian legends of voyages to and from America.

Explicit stories of tall, bearded men who came and taught the Indians.

Serpent deities in Asia and Middle America.

Corn Mother myth (and others) common to Southeast Asia and Middle America.

AGRICULTURAL

Sweet potato: Surely carried across seas, probably from America.

Coconut: Most probably carried to America.

Bottle gourd: Probably carried to America.

Cotton: Most probably carried to America.

Pineapple: Probably carried from America.

Terracing of mountainsides.

Specialized irrigation techniques.

A long list of possible (unconfirmed) plant transfers.

MUSICAL

Panpipe: Identical scale, notes, and ceremonial use in Middle America and Southeast Asia.

Nose flute.

Gourd whistle.

Conch-shell trumpet with similar names in both America and Polynesia. (One Polynesian shell trumpet found in Peru.)

Hollowed log with slit: Used both for music and for signaling in Africa, Middle America, and Polynesia.

ALAN J. BEARDEN

George F. Carter

maneuvers of the square-rigged vessels of the days of sail. The Polynesian dugouts were often one hundred feet long, more than twice the length of Columbus's smallest ship and fully capable of making great sea voyages. The Hindus and the Chinese had large ocean-going ships when written history began in that area, and we have no evidence of how long they had had them before that.

Still, we could *prove* nothing one way or the other. I could argue that the pipes of Pan and parchesi and the system of recording things decimally by tying knots in strings are most unlikely to be independently reinvented. But the opposition could well reply that this was only my opinion. In *their* opinion there was nothing unusual about such independent invention on two sides of the vast ocean. And so there it would rest—unless there were other ways to determine which opinion was more likely right. Fortunately, there is other evidence—and evidence of such nature that opinion plays no part in it.

MAN invents pottery, mathematics, pyramids, and metallurgy. And, in a very real sense, man invents agriculture.

But he does not invent plants.

Plants are natural creations. Man may modify them, and he most certainly did so in developing wild plants into the useful ones of today. But plants have definite homelands. We know for certain that oranges came from southeast Asia, that wheat came from the Near East, and that olives came from the Mediterranean. We also know that all pumpkins and squashes, tomatoes, potatoes, and chocolate, came from America. No one, not even the Independent Inventionists, has ever claimed that men independently created identical or even similar plants in different parts of the world. Here, then, were markers that offered an opportunity to test the separateness of the two worlds.

This knowledge could not be used immediately. We did not know until rather recently just where our domestic plants came from. One of the pioneers in gathering that information was Alphonse De Candolle, who wrote his great work in 1884. At that time there was still uncertainty about such ultra-American crops as squashes and pumpkins, and their American origin was finally established as late as 1931.

About the turn of the century, O. F. Cook became interested in the coconut. He found that practically all the palms of the coconut family were American. He thought it strange indeed that only the domesticated member of this family should be non-American and concluded that it would be more natural for the domestic coconut to come *from* America.

Cook then went on to investigate a number of other plants. He found that there was considerable evidence that coconuts were not the only foreigners on the pre-Columbian American shores. Further, he found that a few American plants had strayed overseas, also. Of these, two seemed to have carried their names with them. One was the sweet potato; the other was the hibiscus. The names were the same both in parts of Middle America and in Polynesia, the island world of the mid-Pacific. On this and other evidence, Cook built the idea that agriculture had originated in America and spread across the Pacific Ocean to Southeast Asia. He was an early Diffusionist, and a pretty extreme one at that.

HIS IDEAS were attacked very sharply. Should they stand, whole schools of thought about the independent growth of civilizations, the psychic unity of mankind, the nature of the growth of culture, the nature of man, the influence of the physical environment on man, and many other beloved theories would have to be discarded. This was a grave threat to academic peace of mind. It was all the more seri-

Make The Hopkins Club Your New York Headquarters

For good fellowship and entertaining, its facilities are outstanding: lounge, library, dining room, cocktail lounge, stag bar, sun deck. Plus living quarters at lower-than-hotel rates for permanent or transient member-guests. Close to theater and midtown business districts. Become a member today!

★

ANNUAL DUES:

(SUBJECT TO FEDERAL AND N.Y.C. TAXES)

Resident membership (for those living *or* working in the New York area)...$35

Limited Resident membership (for those living or working in the New York area who desire to use the Club only on the eight days per year that its stated meetings are held).....$15

Non-Resident membership (for those living *and* working outside a 50-mile radius of New York).....$15

Recent Graduates (alumni who have not completed three years since beginning employment or self-employment, and who do not reside permanently at the Club): $10 for each of the first two years and $15 for the third year.

★

Address inquiries to the membership chairman, Henry D. West

THE JOHNS HOPKINS CLUB OF NEW YORK

106 West 56th Street, New York 19

Telephone: CIrcle 7-7431

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Civilization Puzzle

Continued from page 21

ous because it was backed by an expert in a science.

The way out of this type of difficulty is to get another expert in the same science to counteract the first. (This is a well-known maneuver in more professions than the academic one, by the way.) The Independent Inventionists soon found a champion in the late E. D Merrill, of Harvard. Merrill assured them that Cook was a very poor expert, indeed. The evidence of pre-Columbian coconuts was not valid. Besides, coconuts could float, so that even if they had been in America in pre-Columbian times it would not mean that men had carried them across the Pacific. The seeds of some hibiscus varieties can also float and stay alive. And as for the sweet potato—well, that was just a case of poor historical research. Merrill was a devastating critic, and he demonstrated to the utter satisfaction of the Independent Inventionists, and to the considerable discomfiture of the Diffusionists, that Cook could be ignored. The botanical evidence was destined to be let alone for a few decades.

Meanwhile another champion of diffusion, a most interesting man, entered the battle. G. Elliot Smith was a physician and surgeon. He worked for many years in Egypt and, among other things, became interested in the Egyptian mummies. This is a fascinating subject, and particularly intriguing to a surgeon. In the preparation of the body for embalming, certain parts had to be removed. This was a professional problem, and Dr. Smith took a keen professional interest in the problem of the removal of the viscera and the brain, the closing of the openings so created, the problem of retaining the fingernails during the pickling process. It was enough to make an inquiring doctor wish that he could have been right there to discuss stitches and incisions, and to inquire into just why some of the operations were performed in such deucedly awkward and stylized ways. Dr. Smith was interested enough to read all that he could get his hands on concerning the funerary arts, processes, and rituals of the Egyptians.

Dr. Smith was also a great traveler. He visited the Trobriand Islanders, in the island world north of Australia. Here, to his astonishment, he found people practicing practically the identical embalming techniques: incisions in the same awkward places, the same sort of stitches, and even some of the same rituals. His interest was aroused, and he began to trace other spreads of ideas from Egypt. Soon he was tracing everything imaginable to Egypt. Eventually he was tracing things even farther, for he had begun to look at Inca mummies. Here again he found the same improbable surgical procedures. (I hesitate to discuss the details of the preparation of a body for mummification, for it is a grisly subject to those not used to dealing rather offhandedly with cadavers. The resemblances are specific and detailed, however, and entail such singular solutions of the problem as to leave little doubt of their singular origin, if I may be allowed an apt pun.)

G. Elliot Smith marshaled vast amounts of evidence. However, he destroyed his case by insisting that *everything* came from Egypt. (It seems only fair to record that his critics have been equally extreme in discarding his evidence because of flaws in his presentation of it. This technique is known in best scientific parlance as throwing the baby out with the bathwater. It is probably the major contributor to the high infant mortality in the world of ideas, especially of those ideas that run counter to the notions held by powerful and vocal critics.)

Plant evidence was in disrepute due to the efforts of E. D. Merrill, who had overly brilliantly picked the flaws in Cook's arguments. Cook had opened the door to attack on himself by some uncritical work, and by his enthusiasm's leading him to think that the origin of agriculture, *the* origin of agriculture, was in America. Smith had made the same mistakes. He became too enthused with his Egyptian origins. The battle went to the critics. The Independent Inventionists ruled in peace. All the textbooks and all the lectures assured the rising generation that there had been no contact between America and Asia. The Pacific was a vast and impregnable moat.

But this was an uneasy peace. For facts are a bit like the fires of a volcano. They may lie dormant, but actually they are smoldering away, awaiting only the touch of an investigator's hand to spring into life, capable of destroying the most elaborate of philosophical structures.

In the world of knowledge there is utterly no way of knowing where a given piece of research will lead. The work that was to reopen the Diffusionist controversy began with an attempt by a group of botanists to untangle the relationships of the cottons of the world. Hutchinson, Silow, and Stevens teamed up on this job, using the modern techniques of genetics. They soon found that they could divide the cottons of the world into three groups: the wild and domestic cottons of the Old World, the wild cottons of the New World, and the domestic cottons of the New World. The New World domestic cottons particularly interested them. When they studied cells under high-powered microscopes they found that they contained twice as many hereditary units (chromosomes) as did the other cottons. Further, they could tell that there were two sets of chromosomes there, one the Old World type and the other the New World type. The most probable explanation they could find was that man had brought a domestic cotton from the Old World into the New, and that the two cottons had crossed, combined the full sets of chromosomes from both plants, and created this new plant.

They then did a very interesting thing. They examined the New World domestic cotton and carefully catalogued all its characteristics. Next they searched the cottons of the world to see just what two cottons, if combined, would give them these characteristics. They found the answer in an Asiatic domestic cotton and in a Peruvian wild cotton. They then succeeded in crossing these two plants and producing a near-duplicate of the American domesticated cotton.

We cannot get much nearer to proof than this. Thus the whole question of voyages to America was again wide open. Cotton seeds are not particularly tough. Plant men do not believe that they can float around the ocean and remain alive. To have got to America they must have been carried by someone. (Just how cotton got to America *and* the Old World in the first place is quite another problem of an utterly different time, and I will not try to deal with it here.)

It was at this point that I entered the controversy. Having been "properly" educated in the field of anthropology, I knew that once the American Indians entered America, they had been sealed off and had developed entirely on their own. They were of stupendous interest as the living examples of how inevitable the growth and development of cultures and civilization really were. They were the final answer to the Diffusionist. "Why just look, even the minute details are alike! Weaving, casting of metals, the shape of helmets, feathered robes for royalty. Name it and you can have it. There was almost nothing in the Old World that had not been independently reinvented in the New World. This certainly proves independent invention, doesn't it?"

Ah, yes. But *did* it prove it? Or did it prove just the opposite? Those mischievous geneticists were threatening to lift the lid of Pandora's box. If someone had brought cotton to the New World, how could we be sure that other things, such as zeros, Panpipes, metallurgy, and parchesi hadn't been brought in, also? Obviously this required looking into.

Since I had just finished a doctoral thesis in which I had used plants as tracers for determining the spread of peoples and ideas within America, it was quite natural for me to turn to the plant evidence to see just what there was to this controversy. To begin with, I knew the classical position. There were, in pre-Columbian times, no domestic plants from the Old World in the Americas, and conversely there were no American plants in the Old World. To be specific, the Indians had no wheat or rice, and the peoples of the Old World had no corn, American beans, or squash.

Work began with a review of the cotton situation. Stevens sent me a manuscript discussing the cultural implications of what he and his colleagues had done. It was a disturbing document for a man thoroughly indoctrinated with the idea of the separateness of the Old and New Worlds. I took it to a Johns Hopkins geneticist to have it read from a geneticist's point of view. (In retrospect I must secretly have been hoping that there was a gross error in the work. Otherwise there was an awful lot of reading and thinking ahead of me.) The reply was that the genetics was sound, the conclusions from the data reasonable, and the probability quite good that Hutchinson, Silow, and Stevens had drawn the right conclusion. This left me no alternative but to dive into the problem and see what more evidence there was. The results were shocking.

Cotton was not the only plant involved. The sweet potato had been investigated by a professor hostile to the idea of voyages to and from America. But he had shown that the sweet potato had been in the Pacific area before any possible European spread. Further, there was positive proof in the form of a letter written by one of Cortes's lieutenants that coconuts were in America when Cortes landed there. Still further, tests on the ability of coconuts to survive a long period of drifting in the ocean currents had raised considerable doubts that the coconut could get across the Pacific in that way. And when I applied my knowledge of ocean currents and wind directions, it seemed to me that these chances vanished. Further there were other plants. The bottle gourd was present in America in the earliest levels, and very ancient in the Old World. (I was later to prove by experiments in the Chesapeake Bay that these gourds *could* have floated to America.) But there were American weeds in the islands of the Pacific that certainly could not have blown or drifted there. There *were* American plants that had got out of America and there *were* Asiatic plants that had got into America.

ALUMNI-TRUSTEE NOMINEES

ANNUALLY, alumni of the Johns Hopkins University elect one of their number to the University's Board of Trustees. Elected for a four-year term, there are four alumni trustees sitting simultaneously on the Board. This year alumni will choose between Edwin B. Jarrett and William Purnell Hall

DR. JARRETT, B.A. '18, M.D. '22, during his undergraduate days was president of the Student Council, a member of Omicron Delta Kappa, chairman of the Athletic Board, and captain of the intercollegiate championship lacrosse team.

Dr. Jarrett was president of the Johns Hopkins Alumni Association in 1952–1953, chairman of the annual roll call in 1955–1956, and chairman of the committees which instituted the alumni-trustee and fifty-year-medallion programs.

He practices internal medicine in Baltimore, is on the visiting staffs of several Baltimore hospitals, and is a member of the American College of Physicians.

MR. HALL, B.A. '30, is executive vice president of the Maryland Shipbuilding and Drydock Company. He became associated with the company in 1937 as assistant to the president. In 1943 he was elected vice president, in 1948 he became a member of the board of directors of the company, and in 1954 he was elected to his present post.

He is a member of the board of trustees of Goucher College and a director of the Baltimore branch of the Federal Reserve Bank of Richmond and the Black and Decker Manufacturing Company. He is also on the boards of the Community Chest, the YMCA, the Baltimore chapter of the American Red Cross, and the Baltimore area council of the Boy Scouts of America.

FABIAN BACHRACH

Someone *had* crossed the Pacific both ways. Pandora's box was open. The moat was crossed. The Independent Inventionists' vessel had sprung a leak.

This was not a leak that could be readily repaired by referring to the similarity of men's minds and claiming that the zero concept, wheels, pyramids, and games of chance are so natural to man that they prove nothing when they reappear in similar forms in distant parts of the world. Man does not invent plants. To quote O. F. Cook, "The same plant does not originate twice, and varieties dependent everywhere for their very existence on human care must also have been distributed by human agency." And again: "For the present purposes it suffices to remember that the actual introduction of plants by human agency discounts in advance all objections on the ground of distances and difficulties of communication, and justifies the fullest use of biological or other data in tracing the origin and dissemination of agricultural civilization in the tropics of both hemispheres." The plant evidence was an iceberg that in one rending crash ripped the bottom out of the isolation of pre-Columbian America.

The sequels to the plant story are of interest. The list of plants possibly carried is quite extensive, and almost nothing is now safe from question. It is suspected that Indian corn was known in Africa and in Southeast Asia before Columbus. (The reason that the Europeans first called Indian corn "Turkish wheat" is again being examined, and the old answers no longer satisfy.) Questions are being asked about the time of appearance of the American peanut in Asia, and of the Old World bananas in the Americas. The chicken from Southeast Asia is strongly suspected of being in America in pre-Columbian times, and no one claims that it could either fly or swim the Pacific.

The plant evidence is unshakable, and it is now admitted, at least in part, by its bitterest foes. They tend to retreat firing such Parthian shots as "unimportant in number," "probably a few unimportant accidental landings," "not important to the story of the growth and development of the American Indian civilizations." But I like the simile of Pandora's box. The lid has been lifted and all sorts of ideas have escaped to buzz about our heads.

Quite independently a further line of attack has been reopened. This is the investigation of art resemblances on the two sides of the Pacific. This work has been done by Professor Robert Heine-Geldern of Austria and Dr. Gordon Ekholm of the American Museum of Natural History in New York.

Comparison of the art and architecture of Southeast Asia with that of some parts of the Americas led to the discovery of some remarkable parallels. Not only were there truncated pyramids in Cambodia with temples on top of them, just as there were in Yucatan and in Peru, but they were sometimes almost identical down to small architectural details. The dragons on Chou-dynasty bronze vases were duplicated in minute detail in Mayan Indian art. And these details were multiplied. Criticism immediately centered on the fact that the similarities were picked more or less at random over a considerable range of time and space. This has since been met with a vengeance. Heine-Geldern's latest work names the individual Asiatic city states and points out their art influence in specific times and places in the Americas.

Such thoughts are met with some skepticism. If the people of Southeast Asia actually did such things, why do we have no records of all this? How could such a discovery ever be lost? My reply is to point out that the Norse discovered America about 1000 A.D. and maintained colonies in Greenland until about 1400 A.D. This is in the full light of modern European history. Yet most people are surprised to hear of this, and the effective discovery of America was left to Columbus. Further there is at least one Chinese document that probably refers to a Chinese voyage to America and return.

There are all sorts of strange bits of other evidence. The palm prints of the Maya are specifically like those of the Chinese. The Polynesian legends tell of reaching America, and the American Indian told the Spaniards that people from the Pacific came to them for trading purposes. Then there are the plants, the mathematics, the games, the arts and architecture, and all the other clues.

In capsule form, what we have learned, or are in the process of learning, is this: all the Old World civilizations were interconnected and drew on each other for ideas and inspiration. We do not know just where and how this civilization began. It seems to have started in that area we call the Near East. It is not too difficult to make a case for the single origin of civilization there. The New World civilizations seem to be to some as-yet-unknown degree dependent on the Old World growth of civilization.

Peering into the future, guessing at things to come, I would estimate that the American Indians had made some very modest advances toward agriculture and the beginnings of settled village life. The peoples of the Old World, sometime after 3000 B.C. and before 500 B.C., discovered the New World. They maintained contact over a long period of time. During this time they colonized parts of America, introduced arts, crafts, science, and governmental forms, and carried some domestic plants back and forth. It was this impact that set off the civilizations of Middle America.

We cannot say that civilization would never have been achieved by the American Indians had been left alone. Neither do we know that they ever would have. The natives of Australia, Africa, America north of Mexico, and south and east of Peru and Bolivia certainly never did.

The interesting by-product of all this is that we are faced with the possibility that civilization has but one beginning. One could seriously argue for this view. We do not know that any particular people or any particular geography gave rise to it. Nor would we know how to start the process over again should the present civilization be extinguished. It appears to me from such studies as these that the civilization that we carry today is a unique growth.

If this is true, then man is certainly to be viewed as basically non-inventive. He proves, rather, to be a splendid copyist, infinitely more able to borrow an idea than to invent a new one. To answer one of our earlier questions: man is retentive and not particularly inventive. Civilization, once the germ is implanted, can flourish in desert or jungle, on mountain plateau or lowland plain. It is not the physical environment that is all-important; it is the cultural environment.

These are important things to know, and it is the pursuit of this type of knowledge that underlies the professorial passion for study of such seemingly exotic things as the long-dead civilizations of the American Indians.

EVENTS At Johns Hopkins

SPECIAL EVENTS

CONFERENCES FOR CORPORATION EXECUTIVES—The third conference of the current series will deal with "The Current Situation in Latin America". (Tuesday and Wednesday, Feb. 5 and 6, at the Hotel Statler in Washington, D.C. For further information write to the Johns Hopkins School of Advanced International Studies, 1906 Florida Ave., N.W., Washington 9, D.C.)

COMMEMORATION DAY—Milton Stover Eisenhower will be inaugurated as the eighth president of Johns Hopkins at formal exercises which also mark the eighty-first anniversary of the University's founding. (Friday, Feb. 22, at 11 a.m. in Shriver Hall. All offices will be closed and classes suspended.)

EXHIBITION

THE AGE OF THE CRUSADES—An exhibition at Evergreen House, 4545 N. Charles Street. (Monday, Jan. 21 through Friday, March 1, from 2 to 5 p.m.; closed Saturdays and Sundays.)

VARSITY SPORTS

NOTE—No admission fee is charged for Johns Hopkins home athletic events, but an admission card is required. Persons who wish to attend games during the current University year may obtain a card without charge by sending a stamped, self-addressed envelope to the Department of Physical Education, the Johns Hopkins University, Baltimore 18, Md. ALUMNI OF THE UNIVERSITY should address their requests for admission cards to the Alumni Relations Office, the Johns Hopkins University, Baltimore 18, Md.

BASKETBALL—Johns Hopkins vs. WASHINGTON on Saturday, Jan. 19 (away); WASHINGTON AND LEE on Monday Feb. 4 (Homewood gymnasium at 8:45 p.m.); LOYOLA on Wednesday, Feb. 6 (Homewood gymnasium at 8:45 p.m.); WESTERN MARYLAND on Saturday, Feb. 9 (away); TOWSON TEACHERS on Wednesday, Feb. 13 (away); HAMPDEN-SYDNEY on Saturday, Feb. 16 (Homewood gymnasium at 8:45 p.m.); LOYOLA on Wednesday, Feb. 20 (away); WESTERN MARYLAND on Saturday, Feb. 23 (Homewood gymnasium at 8:45 p.m.). The MASON-DIXON TOURNAMENT will be held Thursday, Friday, and Saturday, March 7, 8, and 9.

FENCING—Johns Hopkins vs. NAVY on Saturday, Jan. 19 (away); TEMPLE on Saturday, Feb. 9 (away); MUHLENBERG on Saturday, Feb. 16 (Homewood gymnasium at 2 p.m.); HAVERFORD on Saturday, Feb. 23 (away).

TELEVISION

JOHNS HOPKINS FILE 7—The University's television program, dealing with all areas of the arts and sciences, may be seen regularly in cities across the country. (Sundays at 3:30 p.m., Eastern Standard Time, on stations of the American Broadcasting Company network; originating at Station WAAM in Baltimore.)

DRAMA AND MUSIC

AMOS TAYLOR, JR., MEMORIAL LECTURE—John Gassner, Sterling professor of playwriting at Yale, will speak on "The Possibilities and Perils of Modern Tragedy." (Sunday, Jan. 20 at 8:30 p.m. in the balcony foyer of Shriver Hall. Admission, 60 cents.)

MRS. WARREN'S PROFESSION—One of the most controversial of George Bernard Shaw's comedies will be presented by the Johns Hopkins Playshop. (Thursday, Friday, and Saturday, Feb. 21, 22 and 23; and again on Thursday, Friday, and Saturday, Feb. 28, March 1 and 2, at 8:30 p.m. in the Playshop in the Homewood Barn. Admission, $1.20.)

BALTIMORE SYMPHONY ORCHESTRA—The two remaining concerts of a series of three for members of the University community will be presented on Sunday, Feb. 17 and Sunday, March 10. (At 4 p.m. in Shriver Hall; admission charge covering all three concerts, $5.)

ALUMNI MEETINGS

JOHNS HOPKINS ALUMNI ASSOCIATION—The annual Commemoration Day banquet will be addressed by Milton S. Eisenhower, president of the University. The glee club will sing, and presentation of the annual roll call check will be made. (Friday, Feb. 22 at 6 p.m. at the Sheraton-Belvedere Hotel in Baltimore. Reservations may be made through the Alumni Relations Office, the Johns Hopkins University, Baltimore.

MEDICAL ALUMNI—The Johns Hopkins Medical and Surgical Association holds its biennial meeting in Baltimore on Friday and Saturday, March 1 and 2, with several supplementary events likely to take place on Thursday, Feb. 28. A wide range of scientific meetings, plus the biennial banquet, will highlight the association's sessions.

PRESIDENT'S TOUR—The president of the University will visit alumni groups in a number of cities. The schedule is tentative and subject to confirmation by mail to alumni living in the regions concerned. ATLANTA—Saturday, April 6; CHICAGO—Saturday, March 23; CLEVELAND—Friday, March 22; NEW YORK—Friday, April 5; PITTSBURGH—Thursday, March 21; WASHINGTON—Thursday, April 4.

PAUL J. EISEL
1015 N. Charles
Baltimore 1, Md.
OLD AND SCHOLARLY
BOOKS
Bought and Sold

The Johns Hopkins Magazine
Homewood, Baltimore 18, Md.

Return Postage Guaranteed

THE JOHNS HOPKINS HOSPITAL

To every one of us, the direct and personal benefit of medical teaching, research, and healing is immeasurable. To help strengthen the free institutions which make it possible is one of the surest investments in his own welfare that any man can make.

JACOB L. HAIN
Investment Adviser
Fifth and Penn Streets
Reading, Pennsylvania
TELEPHONE: *Reading 4-8388*